

CLAIMS

We claim:

1. A method of translating the data structure of a data group pertaining to a computer form from a first format to a second format, comprising the steps of:
 - 3 correlating data fields of the first format with data fields of the second format;
 - 4 identifying data fields from the data group corresponding to the first format; and
 - 5 replacing field identifiers of the identified data fields with field identifiers of the data fields of the second format based on the results of the correlating step.
2. The method of claim 1, further comprising the step of:
 - 3 receiving, through a communication network, the data group and mapping information, the mapping information corresponding to the results of the correlating step.
- 1 3. The method of claim 2, wherein, in the receiving step, the communication network 2 includes the Internet and the computer form includes a web page.
- 1 ✓ 4. The method of claim 1, wherein the results of the correlating step are represented as 2 mapping fields, and the identifying step includes the steps of:
 - 3 adding a prefix to each field identifier of the data fields of the data group, and
 - 4 comparing the prefixed field identifier with field identifiers of the mapping fields to 5 identify the data fields of the data group corresponding to the first format.

1 5. The method of claim 1, further comprising the steps of:
2 embedding the results of the correlating step on the computer form; and
3 transmitting the embedded computer form to a user to fill out through a
4 communication network.

1 6. The method of claim 1, wherein the first format is ECML (Electronic Commerce
2 Modeling Language) format.

1 7. Computer readable code stored on media, for translating the data structure of a data
2 group pertaining to a computer form from a first format to a second format, comprising:
3 first subprocesses for correlating data fields of the first format with data fields of the
4 second format;
5 second subprocesses for identifying data fields from the data group corresponding to
6 the first format; and
7 third subprocesses for replacing field identifiers of the identified data fields with field
8 identifiers of the data fields of the second format based on the results of the correlation to
9 convert the first data field into the third data field.

1 8. The code of claim 7, further comprising:
2 fourth subprocesses for receiving, through a communication network, the data group
3 and mapping information, the mapping information corresponding to the results of the
4 correlating step.

1 9. The code of claim 8, wherein the communication network includes the Internet and
2 the computer form includes a web page.

1 10. The code of claim 7, wherein the results of the correlation performed by the first
2 subprocesses are represented as mapping fields, and the second subprocesses add a prefix to
3 each field identifier of the data fields of the data group and compare the prefixed field
4 identifier with field identifiers of the mapping fields to identify the data fields of the data
5 group corresponding to the first format.

1 11. The code of claim 7, wherein the first processes embed the results of the correlation
2 on the computer form, and transmit the embedded computer form to a user to fill out through
3 a communication network.

12. The code of claim 7, wherein the first format is ECML (Electronic Commerce
Modeling Language) format.

13. A system for processing form data of a computer form, the system comprising:
5 first means for receiving the form data of the computer form through a
communication network, the form data including mapping information and a plurality of first
data field pairs, each of the first data field pairs including a first field name and a first field
value;

6 second means for communicating with the first means, changing at least one of the
7 first field names based on the mapping information, and thereby generating a plurality of
8 second data field pairs; and

9 third means for communicating with the first means and processing the plurality of
10 second field pairs.

14. The system of claim 13, wherein the communication network includes the Internet and
2 the computer form includes a HyperText Markup Language (HTML) form.

1 15. The system of claim 14, wherein, prior to receiving the form data, the first means
2 embeds the mapping information on the computer form and transmits the computer form
3 having the embedded mapping information to a user's computer through the communication
4 network, whereby the user's computer transmits the form data and the mapping information
5 to the first means.

1 16. The system of claim 13, wherein the mapping information includes a plurality of third
2 data field pairs, each of the third data field pairs including a third field name and a third field
3 value, and the second means prepares a hashtable based on the plurality of first data field
4 pairs, the hashtable containing a plurality of key pairs corresponding to the plurality of first
5 data field pairs, each of the key pairs including a key name and a key value, adds a prefix to
6 at least one of the first field names of the first data field pairs, determines if the prefixed first
7 field name matches any of the key names in the hashtable, and replaces the at least one of the
8 first field names with the key value associated with the matching key name based on results
9 of the determination to generate at least one of the plurality of second field pairs.

1 17. The system of claim 13, wherein the third means generates a reply based on results of
2 processing the plurality of second data field pairs, and transmits the reply to the second means
3 through the first means.

1 18. The system of claim 17, wherein the second means passes the reply received from the
2 third means to the first means and then the first means transmits the reply through the
3 communication network.

1 19. The system of claim 13, wherein the first field names include ECML (Electronic
2 Commerce Modeling Language) field names.

1 20. A method of processing form data of a computer form, the method comprising the
2 steps of:

3 receiving the form data of the computer form through a communication network, the
4 form data including mapping information and a plurality of first data field pairs, each of the
5 first data field pairs including a first field name and a first field value;

6 changing at least one of the first field names based on the mapping information and
7 thereby generating a plurality of second data field pairs; and

8 processing the plurality of second data field pairs.

0 21. The method of claim 20, further comprising the steps of:

1 prior to the receiving step, embedding the mapping information on the computer form;
2 and

3 transmitting the computer form having the embedded mapping information to a user's
4 computer through the communication network, so that the form data can be received in the
5 receiving step.

6 22. The method of claim 21, wherein, in the transmitting step, the communication
7 network includes the Internet and the computer form includes a HyperText Markup Language
8 (HTML) form.

1 23. The method of claim 20, wherein, in the receiving step, the mapping information
2 includes a plurality of third data field pairs, each of the third data field pairs including a third
3 field name and a third field value, and the changing step includes the steps of:

4 preparing a hashtable based on the plurality of first data field pairs, the hashtable
5 containing a plurality of key pairs corresponding to the plurality of first data field pairs, each
6 of the key pairs including a key name and a key value,

7 adding a prefix to at least one of the first field names of the first field pairs,

8 determining if the prefixed first field name matches any of the key names in the
9 hashtable, and

10 replacing the at least one of the first field names with the key value associated with
11 the matching key name based on results of the determining step to generate at least one of the
12 plurality of second data field pairs.

1 24. The method of claim 20, further comprising the steps of:
2 generating a reply based on results of the processing step; and
3 ultimately transmitting the reply through the communication network.

25. The method of claim 20, wherein, in the changing step, at least one of the first field
names includes an ECML (Electronic Commerce Modeling Language) field name.

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